Please delete the current Sequence Listing pages of the specification and insert the hard copy pages of the replacement Sequence Listing in their place which are appended hereto and are a true copy of the last Sequence Listing provided in parent application 08/464,339, filed June 5, 1995, now allowed.

Also, please enter and utilize the CRF corresponding to the inserted pages of the Sequence Listing as last filed in the parent application 08/464,339 in this application.

IN THE CLAIMS:

Please cancel claims 1-20 without prejudice and substitute the following new claims 21-53.

21. An isolated polypeptide comprising:

a polypeptide having an amino acid sequence encoded by a polynucleotide which is at least 95% identical to a polynucleotide encoding the polypeptide sequence of amino acids 1 to 163 of SEQ ID NO:2; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A.

22. An isolated polypeptide comprising:

a polypeptide sequence encoded by a polynucleotide which is at least 95% identical to a polynucleotide encoding the same mature polypeptide encoded by the human cDNA contained in ATCC Deposit No. 75874; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A.

23. An isolated polypeptide according to claim 21 comprising:

a polypeptide having an amino acid sequence which is at least 95% identical to amino acids 1 to 163 of SEQ ID NO:2.

24. The isolated polypeptide of claim 21 comprising the polypeptide sequence having amino acids 1 to 163 of SEQ ID NO:2.

25. The isolated polypeptide of claim 23, wherein the polypeptide sequence is identical to the polypeptide sequence of amino acids -21 to 163 of SEQ ID NO:2.

26. The isolated polypeptide of claim 22 which comprises the mature polypeptide encoded by the human cDNA in ATCC Deposit No. 75874.

27. An isolated polypeptide produced from a host cell transformed with a polynucleotide, comprising a polynucleotide sequence which is at least 95% identical to a polynucleotide encoding the deduced amino acid sequence of amino acids 1 to 163 of SEQ ID NO:2; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A.

28. An isolated polypeptide produced from a host cell transformed with a polynucleotide, comprising a polynucleotide sequence which is at least 95% identical to a polynucleotide encoding the same mature polypeptide encoded by the human cDNA of ATCC Deposit No. 75874; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A.

29. An isolated polypeptide according to claim 27, wherein the host cell is transformed with a polynucleotide having a polynucleotide sequence which codes for the mature polypeptide according to SEQ ID NO:2 as set forth in the coding portion of SEQ ID NO: 1.

30. An isolated polypeptide according to claim 27, wherein the host cell is transformed with a polynucleotide, a portion of

which is identical to a polynucleotide encoding the polypeptide having the polypeptide sequence of amino acids 1 to 163 of SEQ ID NO:2.

31. An isolated polypeptide according to claim 27, wherein the host cell is transformed with a polynucleotide which is identical to a polynucleotide encoding the polypeptide having the polypeptide sequence of amino acids 1 to 163 of SEQ ID NO:2.

32. An isolated polypeptide according to claim 28 produced from a host cell transformed with a polynucleotide encoding a polypeptide which comprises the mature adrenergic receptor protein.

33. An isolated polypeptide according to claim 27, wherein the host cell is transformed with a polynucleotide which comprises a polynucleotide sequence identical to the nucleotides of SEQ ID NO:1 that encode amino acids 1 to 163 of SEQ ID NO:2.

34. An isolated polypeptide according to claim 27, wherein the host cell is transformed with a polynucleotide which comprises a polynucleotide sequence identical to the polynucleotide sequence of SEQ ID NO:1.

35. A compound which activates the polypeptide of claim 21.

36. A compound which activates the polypeptide of claim 22.

37. A compound which inhibits activation of the polypeptide of claim 21.

38. A compound which inhibits activation of the polypeptide of claim 22.

39. A method for the treatment of a patient having need to

activate a polypeptide having an amino acid sequence encoded by a polynucleotide which is at least 95% identical to a polynucleotide encoding the polypeptide sequence of amino acids 1 to 163 of SEQ ID NO:2; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A, said method comprising: administering to the patient a therapeutically effective amount of the compound of claim 35.

40. A method for the treatment of a patient having need to activate a polypeptide having an amino acid sequence encoded by a polynucleotide which is at least 95% identical to a polynucleotide encoding the polypeptide sequence of amino acids 1 to 163 of SEQ ID NO:2; said polypeptide having the ability to stimulate proliferation of endothelial cells in the presence of comitogen Con A, said method comprising: administering to the patient a therapeutically effective amount of the compound of claim 37.

41. The method of claim 39 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said agonist and expressing said agonist *in vivo*.

42. The method of claim 40 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said agonist and expressing said agonist *in vivo*.

43. A process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim 21 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

44. A process for diagnosing a disease or a susceptibility to a disease related to an over-expression of the polypeptide of claim 21 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

45. A process for diagnosing a disease or a susceptibility to a disease related to an under-activity of the polypeptide of claim 21 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

~~47~~ 46. A process for diagnosing a disease or a susceptibility to a disease related to an over-activity of the polypeptide of claim 21 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

~~48~~ 47. The polypeptide of claim 21 wherein the polypeptide is a soluble fragment of the polypeptide and is capable of stimulating proliferation of endothelial cells in the presence of comitogen Con A.

~~49~~ 48. A diagnostic process comprising:

analyzing for the presence of the polypeptide of claim 21 in a sample derived from a host.

~~50~~ 49. A method of identifying compounds which interact with the polypeptide of claim 21 comprising:

contacting a cell containing a VIGF gene and a reporter gene with a compound; and

determining whether the compound interacts with the VIGF polypeptide.